pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0254886**
Wastewater Type	**Sewage**	APS ID	**1048601**
Facility Type	**SRSTP**	Authorization ID	**1370942**

NPDES PERMIT FACT SHEET
INDIVIDUAL SFTF/SRSTP

Applicant, Facility and Project Information

Applicant Name	**Barbara & Thomas Mannion**	Facility Name	**Mannion Properties SRSTP**
Applicant Address	1986 Aleppo Road	Facility Address	1986 Aleppo Road
	Wind Ridge, PA 15380-1324		Wind Ridge, PA 15380-1324
Applicant Contact	Thomas Mannion	Facility Contact	
Applicant Phone	(724) 833-5623	Facility Phone	
Client ID	314081	Site ID	784241
SIC Code	8800	Municipality	Aleppo Township
SIC Description	Private Households	County	Greene
Date Application Received	September 20, 2021	WQM Required	No
Date Application Accepted	September 29, 2021	WQM App. No.	

Project Description: Renewal of NPDES Permit.

Summary of Review

The permittee has applied for a renewal of NPDES Permit No. PA0254886. NPDES Permit No. PA0254886 was previously issued on February 12, 2015. The WQM Permit No. 3014011 issued on February 12, 2015 addressed the new treatment plant that will meet DEP SOP regarding SRSTP.

This small residential sewage treatment plant (SRSTP) consists of a 1,500 gallon dual compartment septic tank with Orenco Biotube Pump Vault/Filter Unit, an Orenco AdvanTex AX20 Filter Unit, and an Orenco Model UV Unit for disinfection. This system is indicated as NSF certified. The treated effluent before discharging to the outfall is disinfected by Orenco AXUV UV Disinfection unit with a rated capacity of 5 gallons per minute. The treated effluent then discharged to a stream channel which flows to South Fork Dunkard Fork that is classified as Trout Stocking Fishery per Chapter 93 Designated Uses.

The permitted flow is 400 gallons per day. The project located downstream of the floodplain as indicated in the stream stats graph. The evaluation of the permit application and development of effluent limitations are based on applicable regulations, policies, procedures, and guidelines.

The Mannion's application (Attachment 2) has the laboratory tests which show limits surpassing for the period of 10/23/2019-10/28/2020 due to sampling being conducted prior to UV treatment (i.e., not at the Outfall 001 effluent pipe). Sampling has been conducted at Outfall 001 since then for the period of 11/30/2020-6/28/2021 and no limits exceedance were noticed.

Act 14 Notification has been served with no comments received.

No violations or penalties checked for the facility.

Approve	Deny	Signatures	Date
X		Hazim Aldalli / Environmental Engineering Specialist	February 24, 2022
x		Mahbuba Iasmin Ph.D., P.E. / Environmental Engineer Manager	February 24, 2022

Summary of Review
Public Participation DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0.0004
Latitude	39º 51' 9.27"	Longitude	-80º 27' 36.75"
Quad Name	New Freeport	Quad Code	2002
Wastewater Description:	Sewage Effluent		
Receiving Waters	Trib 32566 To South Fork Dunkard Fork	Stream Code	32566
NHD Com ID	73874728	RMI	0.08
Drainage Area	0.76	Yield (cfs/mi^2)	0.001
Q_{7-10} Flow (cfs)	0.00608	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	1284	Slope (ft/ft)	
Watershed No.	20-E	Chapter 93 Class.	TSF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status		Name	

Background/Ambient Data		Data Source
pH (SU)		
Temperature (°F)		
Hardness (mg/L)		
Other:		

Nearest Downstream Public Water Supply Intake	Aleppo TWP		
PWS Waters		Flow at Intake (cfs)	
PWS RMI	0.0	Distance from Outfall (mi)	0.00

Changes Since Last Permit Issuance:

Other Comments: PWS is a groundwater dependent.

Treatment Facility Summary				
Treatment Facility Name: Mannion Properties SRSTP				
WQM Permit No.	**Issuance Date**			
3014011	February 12, 2015			
Waste Type	**Degree of Treatment**	**Process Type**	**Disinfection**	**Avg Annual Flow (MGD)**
Sewage	Secondary Bio-reactor	Septic Tank, Biotube Pump	Ultraviolet	0.0004
Hydraulic Capacity (MGD)	**Organic Capacity (lbs/day)**	**Load Status**	**Biosolids Treatment**	**Biosolids Use/Disposal**
0.0004	0.68	Not Overloaded	Septic Tank	No Information

Compliance History	
Summary of AMRs:	Between 06/01/2018 and 05/31/2021, the facility has complied with submittal of Annual Maintenance Reports (AMR). There were no reported effluent limit violations reported.
Summary of Inspections:	The facility received a compliance evaluation on 6/14/2017. The inspection did not result in any violations and there are no reported enforcements against this facility.

Development of Effluent Limitations			
Outfall No.	001	**Design Flow (MGD)**	0.0004
Latitude	39º 51' 9.27"	**Longitude**	-80º 27' 36.75"
Wastewater Description:	Sewage Effluent		

Technology-Based Limitations (TBELs)

The following effluent limitations and monitoring requirements, at a minimum, will be established in all new and renewed SRSTP permits based on the requirements of DEP's "Standard Operating Procedure (SOP) for Clean Water Program New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Application" (SOP No. BCW-PMT-003, Version 1.8, Final, November 9, 2012, Revised May 17, 2019).

Parameter	Avg	IMAX	Sample Type	Frequency: SFTFs	Frequency: SRSTPs
Flow (GPD)	Report	XXX	Estimate (SRSTPs) Measured (SFTFs)	1/month	1/year
BOD5 (mg/L)	10	20	Grab	1/month	1/year
TSS (mg/L)	10	20	Grab	1/month	1/year
pH*	6.0 S.U. Inst. Min.	9.0 S.U.	Grab	1/month	1/year
TRC (mg/L)	Report for SRSTPs; Use TRC Spreadsheet to determine WQBELs or 0.02 mg/L for SFTFs		Grab	1/month	1/year
Fecal Coliform (No./100 ml)	200 Geometric Mean / Average**		Grab	1/month	1/year

***** Technology-Based effluent limits for pH will be imposed based upon Federal Regulation 133.102(c) and State Regulation 95.2(1).

** Use the Geometric Mean if the Sampling Frequency is at least 1/month. Use Annual Average, Semi-Annual Average or Quarterly Average if the Sampling Frequency is less than 1/month.

Additional Considerations:

BOD_5, TSS, and Fecal Coliform limitations were imposed based upon the Department's SOP – New and Reissuance Individual SRSTP NPDES Permits.

Technology-based effluent limits for pH will be imposed based upon State Regulation 95.2(1).

BOD_5 limitations were imposed instead of $CBOD_5$ which reflect the most stringent limitation amongst the Technology-Based Effluent Limitations and based upon the Department's SOP – New and Reissuance Individual SRSTP NPDES Permits, and per DEP Small Flow Treatment Facilities Manual (Nov. 2003).

Sampling frequency for all parameters is 1/year which is consistent with the Department's SOP - New and Reissuance of SRSTP Individual NPDES Permit Applications.

For SFTFs / SRSTPs with UV disinfection systems, it is not necessary to require UV intensity or transmittance monitoring in the permit.

Sewage discharges with design flows < 2,000 gpd do not require monitoring for Total Nitrogen and Total Phosphorus in new and reissued permits.

The applicant does not use eDMR and current policy does not require eDMR to be used for SRSTPs.

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (362-0400-001), SOPs and/or BPJ.

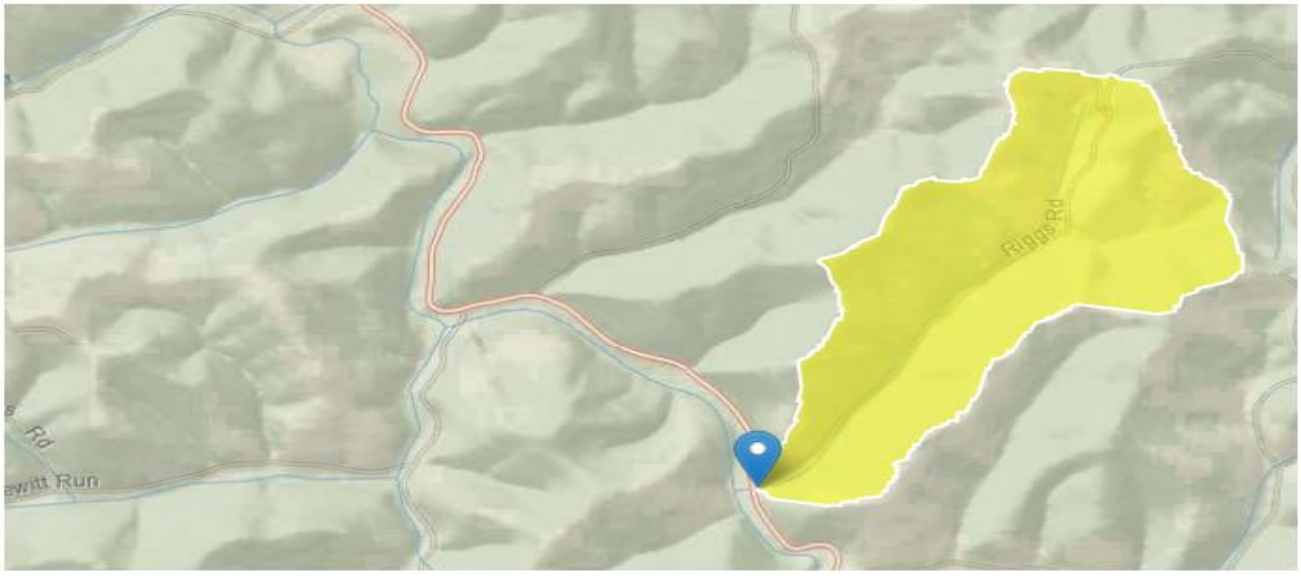
Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Annual Average	Average Weekly	Minimum	Annual Average	Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/year	Estimate
pH (S.U.)	XXX	XXX	6.0 Inst. Min	XXX	9.0 Inst. Max	XXX	1/year	Grab
BOD5	XXX	XXX	XXX	10	XXX	20	1/year	Grab
TSS	XXX	XXX	XXX	10	XXX	20	1/year	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200	XXX	XXX	1/year	Grab

Compliance Sampling Location: Outfall #001

StreamStats Report

Region ID: PA
Workspace ID: PA20211004193100501000
Clicked Point (Latitude, Longitude): 39.85255, -80.46054
Time: 2021-10-04 15:31:22 -0400



Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.76	square miles
ELEV	Mean Basin Elevation	1284	feet

Low-Flow Statistics Parameters [Low Flow Region 4]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.76	square miles	2.26	1400

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
ELEV	Mean Basin Elevation	1284	feet	1050	2580

Low-Flow Statistics Disclaimers [Low Flow Region 4]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors

Low-Flow Statistics Flow Report [Low Flow Region 4]

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.0217	ft^3/s
30 Day 2 Year Low Flow	0.0426	ft^3/s
7 Day 10 Year Low Flow	0.00608	ft^3/s
30 Day 10 Year Low Flow	0.0134	ft^3/s
90 Day 10 Year Low Flow	0.0282	ft^3/s

Low-Flow Statistics Citations

Stuckey, M.H.,2006, Low-flow, base-flow, and mean-flow regression equations for Pennsylvania streams: U.S. Geological Survey Scientific Investigations Report 2006-5130, 84 p. (http://pubs.usgs.gov/sir/2006/5130/)